

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q77326

Kyung-ah KIM

Appln. No.: 10/733,579

Group Art Unit: 2424

Confirmation No.: 8600

Examiner: Franklin S. ANDRAMUNO

Filed: December 12, 2003

For: BROADCAST PROGRAM INFORMATION SEARCH SYSTEM AND METHOD

**SUBMISSION OF APPEAL BRIEF**

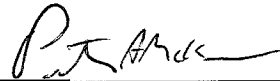
**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. The statutory fee of \$540.00 is being remitted. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: October 7, 2010

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**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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**I. REAL PARTY IN INTEREST**

The real party in interest is SAMSUNG ELECTRONICS, CO., LTD., by virtue of an assignment executed by Kyung-Ah Kim (Appellant, hereafter), on November 12, 2003, and recorded by the Assignment Branch of the U.S. Patent and Trademark Office on December 12, 2003 (at Reel 014793, Frame 0969).

## **II. RELATED APPEALS AND INTERFERENCES**

To the knowledge and belief of Appellant, the Assignee, and the undersigned, there are no other appeals or interferences before the Board of Appeals and Interferences that will directly affect or be affected by the Board's decision in the instant Appeal.

### **III. STATUS OF CLAIMS**

Claims 1-15, 17-19, 21 and 23-24 are the claims pending in the present application, stand finally rejected and are all subject of this Appeal. Claims 16, 20 and 22 are cancelled.

**IV. STATUS OF AMENDMENTS**

The instant Appeal is in response to the Final Office Action dated March 3, 2010. No amendments to the claims have been filed subsequent to the March 3, 2010 Final Office Action.

**V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The instant application is directed toward a broadcast program information search system and a method for displaying search terms (or keywords) based of high search frequency.

***Independent claims***

**Claim 1**

Accordingly to claim 1, there is required a content program information search system that includes:

a server (FIG. 2, server 300) logically connected to a first database (FIG. 2, first DB 310) configured to store a plurality of search terms inputted from external devices (See FIG. 2, page 12, lines 7-9 and page 13, line 17 to page 15, line 5); and

a digital signal receiver (FIG. 2, digital signal receiver 200) configured to detect and to display for a selected search term of the plurality of search terms at least one of a content signal and detailed content information from a digital signal transmitted from a transmitter (See FIGS. 2 and 3, page 12, line 7 to page 13, line 10, page 19, lines 4-14 and page 21, lines 16-21),

wherein said server is configured to extract from the first database based on an order of priority based on search frequency and to transmit to the transmitter at least one transmission search term of the plurality of search terms, and said digital signal receiver is configured to display in the order of priority the at least one transmission search term transmitted from the transmitter (See page 14, line 11 to page 15, line 5),

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6).

Claim 8

According to claim 8, there is required a content program information search system that includes:

a server (FIG. 2, server 300) logically connected with a database (FIG. 2, first DB 310) configured to store a plurality of search terms transmitted from a digital signal receiver, said server configured to extract at least one transmission search term of the plurality of search terms according to an order of priority based on search frequency from the database and to transmit the at least one transmission search term (See FIG. 2, page 12, lines 7-9 and page 13, line 17 to page 15, line 5);

the at least one digital signal receiver (FIGS. 2 and 3, digital signal receiver 200) configured to detect and to display from a digital signal transmitted from the transmitter detailed content information for a selected search term of the plurality of search terms, and to transmit the at least one selected search term to an internet service provider (See FIGS. 2 and 3, page 12, line 7 to page 13, line 10, page 19, lines 4-14 and page 21, lines 16-21); and

the internet service provider (FIG. 2, ISP 400) configured to transmit to the database the selected search term transmitted from the at least one digital signal receiver, and to provide a path for transmitting to the at least one digital signal receiver the at least one transmission search term (See page 15, lines 6-16),



wherein the at least one digital signal receiver is configured to display (FIG. 3, graphic engine 250) in a set arrangement pattern the at least one transmission search term in the order of priority transmitted from the server (See FIGS. 2 and 3, page 15, line 19 to page 16, line 2 and page 17, lines 14-19), and

wherein the digital signal receiver is an external device (See FIG. 2, page 13, lines 5-10),

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6).

#### Claim 11

According to claim 11, there is required an information search method for a system including a digital signal receiver (FIGS. 2 and 3, digital signal receiver 200) connected through an internet network (FIG. 2, ISP 400) to a server (FIG. 2, server 300) for providing content program guide information. The method includes:

detecting for a selected search term detailed content information from a digital signal transmitted from a transmitter to the digital signal receiver, and transmitting the selected search term to the server through the internet network (See FIGS. 2 and 3, page 12, line 7 to page 13, line 10, page 19, lines 4-14 and page 21, lines 16-21);

storing the selected search term in a database logically connected to the server (See page 13, lines 19-23); and

extracting at least one transmission search term according to an order of priority based on search frequency from the database and transmitting to the transmitter the at least one

transmission search term and the content program guide information, the selected search term being a search term one of inputted and selected through a search mode view set in the digital signal receiver to search for the content program guide information (See FIG. 2, page 12, lines 7-9 and page 13, line 17 to page 15, line 5);

wherein the transmitter is an external device (See FIG. 2),

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6).

#### Claim 15

According to claim 15, there is required a content program information search system that includes:

a first database (FIG. 2, first DB 310) configured to store a plurality of search terms input from external devices, a search term of the plurality of search terms being forwarded to said first database after a search is performed based on the forwarded search term (See FIG. 2, page 12, lines 7-9 and page 13, line 17 to page 15, line 5); and

a server (FIG. 2, server 300) configured to extract based on an order of priority a transmission search term of the plurality of search terms from said first database, and to transmit the transmission search term via at least one of a wireless transmitter and a network transmission device to a digital signal receiver (See FIG. 2, page 12, lines 7-9 and page 13, line 17 to page 15, line 5),

wherein the search is for at least one of a content program signal and a detailed content information detected by the digital signal receive (See FIGS. 2 and 3, page 12, line 7 to page 13, line 10, page 19, lines 4-14 and page 21, lines 16-21), and

wherein the order of priority is based on a search frequency for the forwarded search term, (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6),

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6).

#### Claim 19

According to claim 15, there is required a content program information receiving search system that includes:

a controller (FIG. 3, controller 265) configured to generate a list of search terms according to an order of priority based on at least one transmission search term received, to provide a selected search term from the list of search terms to a digital signal receiver, and to forward to a server the selected search term (page 19, line 10 to page 22, line 11); and

said digital signal receiver (FIGS. 2 and 3, digital signal receiver 200) configured to detect and to display for the selected search term at least one of a content signal and detailed content information from a digital signal transmitted from a transmitter, the at least one transmission search term being one of received in the digital signal and received from the server via a digital network (See FIGS. 2 and 3, page 12, line 7 to page 13, line 10, page 19, lines 4-14 and page 21, lines 16-21),

wherein the order of priority is based on a search frequency of the selected search term  
(See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6); and

wherein the search term is input from an external device (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6),

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6).

***Dependent claims 23 and 24 separately argued in the Appeal Brief***

**Claim 23**

The content program information search system as claimed in claim 1, wherein the search frequency corresponds to a frequency at which the search terms are typed in by the user (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6).

**Claim 24**

The content program information search system as claimed in claim 1, wherein the search frequency corresponds to a frequency at which the search terms are selected by the user (See page 3, lines 5-10, page 15, lines 4-8 and page 29, line 19 to page 30, line 6).

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-4, 7 and 23-24 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Robarts et al. (U.S. Publication No. 2005/0278741; hereinafter “Robarts”) in view of Lee et al. (U.S. Patent No. 6,463,428; hereinafter “Lee”) and further in view of Dagtas et al. (U.S. Publication No. 2003/0093260; hereinafter “Dagtas”).

Claims 8-15, 17-19 and 21 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Robarts in view of Lee and Dagtas, and further in view of Kikinis (U.S. Patent No. 7,213,256; hereinafter “Kikinis”).

Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Robarts in view of Lee and Dagtas, and further in view of Hori et al. (U.S. Patent No. 7,209,942; hereinafter “Hori”).

## **VII. ARGUMENT**

**I. CLAIMS 1-4, 7 AND 23-24 ARE REJECTED UNDER 35 U.S.C. § 103(A) AS ALLEGEDLY BEING UNPATENTABLE OVER ROBARTS ET AL. (U.S. PUBLICATION NO. 2005/0278741; HEREINAFTER “ROBARTS”) IN VIEW OF LEE ET AL. (U.S. PATENT NO. 6,463,428; HEREINAFTER “LEE”) AND FURTHER IN VIEW OF DAGTAS ET AL. (U.S. PUBLICATION NO. 2003/0093260; HEREINAFTER “DAGTAS”).**

The Examiner must allow the claims unless “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1391 (2007). Appellant respectfully submits that this criteria for establishing obviousness has not been met with regard to the instant application.

In page 4 of the Final Office Action dated March 3, 2010 (hereinafter “Final Office Action”), the Examiner states that Robarts and Lee are silent in teaching a system “wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device,” as recited in claim 1. However, in the Response to the Arguments section in page 2 of the Final Office Action, the Examiner relies on column 5, lines 14-15 of Lee to allegedly disclose that the search frequency corresponds to a frequency of the search terms and appears to only rely on Dagtas to allegedly show that the search term is input from an external device. Specifically, the Examiner cites paragraph [0055] of Dagtas to allegedly show the input from an external device.

In the Advisory Action dated June 23, 2010 (hereinafter “Advisory Action”), the Examiner cites FIG. 15 and paragraph [0147] of Robarts<sup>1</sup> for allegedly disclosing the claimed feature of “wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device.” Specifically, the Examiner alleges that “[Robarts] teaches on (figure 15) a search field [in which] Magic has been inserted. The output of this search results in various forms of programming including, discovery channel, disney and sports. As a result, [Robarts] teaches a system at which the frequency of the search term are input. The frequency of the word magic/magical is output as shown on figure 15.” Further, the Examiner asserts that page 11, paragraph [0147] teaches that EPG permits viewers to merge their individual queries into composite queries. The EPG also permits a viewer to save queries in a convenient hierarchic structure (*See Continuation Sheet of the Advisory Action*). Appellant respectfully disagrees with the Examiner for at least the following reasons.

**A. Discussion Of The References**

**ROBARTS**

Robarts is directed towards operating electronic program guides (EPG) using auto-generated and viewer generated queries to identify programs or other programming information. Robarts discloses that the EPG can further be configured to merge query of individual viewers into a composite query which searches for programs on behalf of all viewers (page 2, paragraph [0021], lines 1-3).

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<sup>1</sup> In the continuation sheet of the Advisory Action, the Examiner incorrectly cites FIG. 15 and paragraph [0147] of Dagtas. Appellant notes that Dagtas does not have FIG. 15 or paragraph [0147]. However, it appears that the Examiner intends to rely on FIG. 15 and paragraph [0147] of Robarts. During a brief telephone conversation on June 28, 2010, the Examiner confirmed the above.

LEE

Lee is directed to a user interface for querying and displaying records from a database that employs a physical metaphor for the process of constructing queries and viewing results. The search criteria are shown as strings of beads in a three-dimensional scene, each bead representing a criterion and each string representing a different category (column 1, lines 60-65). Lee discloses that title and descriptions of returned results are scanned for terms that occur with a degree of frequency and these terms are stored in a keyword list. The degree of frequency corresponds to the frequency in which the terms occur in the description of the chosen program. As such, Lee discloses that a term that occurs several times in the description of the chosen program will be stored in the keyword list (column 5, lines 1-27).

DAGTAS

Dagtas is directed to an apparatus and method for conducting exclusive and inclusive metadata searches to identify and select multimedia programs (paragraph [0001]). Dagtas discloses a metadata search controller that compares user specified search words with metadata words to find programs that meet the user specified search criteria. The metadata search controller can execute an exclusive metadata search to search for exact matches between a user specified search word and metadata word. Further, the metadata search controller can also search for matches between a user specified search word and a metadata word that is related to the user specified search word in a word pair contained within a word pair database (paragraph [0015]).



**B. The Proposed Combination Of Robarts, Lee and Dagtas Fails To Disclose Each Of The Features Of The Independent Claims.**

Claim 1

Claim 1 is directed to a content program information search system, and requires:

a server logically connected to a first database configured to store a plurality of search terms inputted from external devices; and

a digital signal receiver configured to detect and to display for a selected search term of the plurality of search terms at least one of a content signal and detailed content information from a digital signal transmitted from a transmitter,

wherein said server is configured to extract from the first database based on an order of priority based on search frequency and to transmit to the transmitter at least one transmission search term of the plurality of search terms, and said digital signal receiver is configured to display in the order of priority the at least one transmission search term transmitted from the transmitter,

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device.

Regarding independent claim 1, Appellant respectfully submits that claim 1 would not have been obvious at the time of invention, as the Examiner's proposed combination of Robarts, Lee and Dagtas fails to teach, or fairly suggest, each and every feature of claim 1. In particular, Appellant respectfully submits that the Examiner's proposed combination of references fails to teach or fairly suggest "wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device."

Importantly, Appellant would like to respectfully point out that the issue here is not merely whether the search terms are input from an external device or determining how frequently the search word appears in a search result. Instead, the claimed feature requires that the search frequency correspond to the frequency at which the search terms are input by the external device.

That is, the input frequency of the search terms (how frequently a particular search term was input) are used to determine the order of priority.

### ROBARTS

In FIG. 15 and the corresponding description in paragraphs [0104]-[0141], Robarts discloses a quick find window 300 in which a viewer enters data from a numeric pad on the remote control handset. For each key, the EPG constructs a query which interprets the data as possibly representing a number or one of the letters associated with the numeric key. The EPG then executes the query to identify any EPG data item that satisfies the query and displays a list of the searched item. Here, Robarts at most teaches a quick search using numeric key pads that produces a list with elements that match the query, but does not teach or suggest “a frequency at which the search terms are input”, as recited in claim 1.

Moreover, in paragraph [0147], Robarts discloses merging individual queries into composite queries and saving queries. Further, Robarts discloses that EPG permits a viewer to save queries in a convenient hierarchic structure. However, merging individual queries into composite queries and hierarchically saving queries does not teach or suggest prioritizing based on “a frequency at which the search terms are input,” as recited in claim 1.

### LEE

In column 5, lines 14-15, Lee discloses that the keywords in the list could each be ranked based on the frequency in which the keyword appeared in the search result. However, the frequency at which the keyword appeared in a search result does not teach or suggest a frequency at which the search terms are input.

DAGTAS

In paragraph [0055], Dagtas discloses a controller that generates a message asking the user to input a desired search field weight factor. However, this does not teach or suggest inputting search terms from an external device. Moreover, even if, *assuming arguendo*, Dagtas discloses input from an external device, it does not teach or suggest a frequency at which the search terms are input from the external input device.

In arguing that the combination of Robarts, Lee and Dagtas would render claim 1 obvious, the Examiner argues that “[t]herefore, it would have been obvious at the time of the invention to include the use of a search frequency at which the search terms are input from the external input device. This is a useful combination because the system is capable of browsing through a list of keywords and filtering them before inserting them to a dictionary.” See page 4, last two lines and page 5, first two lines of the Final Office Action.

However, the Examiner’s rejection fails to indicate why it would be obvious, based on the proposed combination of references, to create a server that is configured to extract from the first database based on an order of priority based on search frequency, wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device, when none of the references discloses such a search frequency.

Since Robarts, Lee and Dagtas, alone or in combination, do not teach or suggest the input frequency of the search terms being used to determine the order of priority, i.e., “the search frequency corresponds to a frequency at which the search terms are input from the external input device,” Appellant respectfully submits that claim 1 patentable.

In view of the above, Appellant respectfully requests the Board of Patent Appeals and Interferences to withdraw the rejection of claim 1.

Claims 2-4, 7 and 23-24

Appellant respectfully submits that claims 2-4, 7 and 23-24 depend from independent claim 1, and therefore these claims are patentable at least by virtue of their dependency and the additional features recited therein.

With regard to claim 23, Appellant respectfully submits that paragraphs [0021] and [0023] of Robarts, cited in page 7 of the Final Office Action, do not teach or suggest the feature of “wherein the search frequency corresponds to a frequency at which the search terms are typed in by the user.”

For instance, in the cited portions of the reference, Robarts discloses that the EPG creates a unified query which combines three queries to jointly identify programs which satisfy any one of the three queries (paragraph [0021]). Further, Robarts discloses that the keypad has ten number keys which also correspond to associated letters (paragraph [0024]). Appellant respectfully submits that combining queries to create unified queries and disclosing a keypad with associated letters does not teach or suggest that “the search frequency corresponds to a frequency at which the search terms are typed in by the user.”

With regard to claim 24, Appellant respectfully submits that paragraph [0023] of Robarts, cited in page 7 of the Final Office Action, does not teach or suggest the feature of “wherein the search frequency corresponds to a frequency at which the search terms are selected by the user.”

For instance, in the cited portion of the reference, Robarts merely discloses that the EPG is configured to run queries in the background. However, queries running in the background does not teach or suggest that “the search frequency corresponds to a frequency at which the search terms are typed in by the user.”

**II. CLAIMS 8-15, 17-19 AND 21 ARE REJECTED UNDER 35 U.S.C. § 103(A) AS ALLEGEDLY BEING UNPATENTABLE OVER ROBARTS IN VIEW OF LEE AND DAGTAS, AND FURTHER IN VIEW OF KIKINIS (U.S. PATENT NO. 7,213,256; HEREINAFTER “KIKINIS”).**

Claims 8, 11, 15 and 19

Appellant respectfully submits that since claims 8, 11, 15 and 19 recite subject matter analogous to claim 1 and since Kikinis does not teach or suggest the features of claim 1 missing in Robarts, Lee and Dagtas, claims 8, 11, 15 and 19 are patentable for at least the analogous reasons claim 1 is patentable and the additional features recited therein.

Claims 9, 10, 12-14, 17-18 and 21

Appellant respectfully submits that claims 9, 10, 12-14, 17-18 and 21 depend from one of the independent claims, and therefore these claims are patentable at least by virtue of their dependency and the additional features recited therein.

**III. CLAIMS 5 AND 6 ARE REJECTED UNDER 35 U.S.C. § 103(A) AS ALLEGEDLY BEING UNPATENTABLE OVER ROBARTS IN VIEW OF LEE AND DAGTAS, AND FURTHER IN VIEW OF HORI ET AL. (U.S. PATENT NO. 7,209,942; HEREINAFTER “HORI”).**

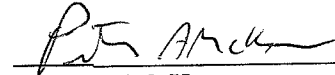
Appellant respectfully submits that since claims 5 and 6 depend from claim 1 and since Hori does not cure the deficiencies of Robarts, Dagtas ad Lee noted above with regard to claim 1, claims 5 and 6 are patentable at least by virtue of their dependency and the additional features recited therein.

**VIII. CONCLUSION**

The rejections of claims 1-15, 17-19, 21 and 23-24 fail to establish a *prima facie* case of unpatentability of Appellant' claims, and thus, should be reversed.

The statutory fee (37 C.F.R. §41.37(a) and 1.17(c)) is being remitted. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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**23373**

CUSTOMER NUMBER

Date: October 7, 2010

**CLAIMS APPENDIX**

CLAIMS 1-15, 17-19, 21 and 23-24 ON APPEAL:

1. A content program information search system comprising:

a server logically connected to a first database configured to store a plurality of search terms inputted from external devices; and

a digital signal receiver configured to detect and to display for a selected search term of the plurality of search terms at least one of a content signal and detailed content information from a digital signal transmitted from a transmitter,

wherein said server is configured to extract from the first database based on an order of priority based on search frequency and to transmit to the transmitter at least one transmission search term of the plurality of search terms, and said digital signal receiver is configured to display in the order of priority the at least one transmission search term transmitted from the transmitter,

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device.

2. The content program information search system as claimed in claim 1, further comprising an internet service provider configured to provide a path to transmit the selected



search term of the plurality of search terms from an external device of the external devices to the first database, the external device being at least one digital signal receiver connected to said internet service provider.

3. The content program information search system as claimed in claim 1, wherein said digital signal receiver includes:

- a detector configured to detect the at least one transmission search term of the plurality of search terms from the digital signal;

- a list generator configured to generate a search term list by arrangement of the detected transmission search term based on the order of priority;

- a controller configured to control display of the generated search term list if a user request for a search is inputted, and, if the selected search term is selected from the displayed search term list, to control the display of the detailed content information for the selected search term;

- a graphic engine configured to provide in a displayable form the search term list and the detailed content information for the selected search term according to control of said controller;

- a display unit configured to display at least one of the search term list and the detailed content information provided by said graphic engine; and

- a communication interface configured to transmit the selected search term to the first database.

4. The content program information search system as claimed in claim 3, wherein said server further comprises a second database configured to store content program guide information including the detailed content information, the server configured to transmit to the transmitter the broadcast program guide information and the at least one transmission search term of the plurality of search terms according to the order of priority.

5. The content program information search system as claimed in claim 4, wherein said detector is configured to detect the content program guide information from the digital signal, and said digital signal receiver further includes:

a proper noun extractor configured to extract at least one proper noun from the detected content program guide information; and

a proper noun storage configured to store the extracted proper noun, and, if the user request for the search in at least one of a noun search mode based on a proper noun, a text search mode based on text input, and a category search mode based on a category is received, the controller controls searching for a desired content program from the content program guide information according to the search mode requested.

6. The content program information search system as claimed in claim 5, wherein said digital signal receiver further includes:

an information storage configured to store the detected content program guide information; and

a search term storage configured to store the at least one transmission search term according to the order of priority.

7. The content program information search system as claimed in claim 1, further comprising an internet service provider providing a path for transmitting the selected search terms of the plurality of search terms transmitted from the external devices to the first database, wherein at least one external device of the external devices is a terminal configured to input and to output data and is configured to be connected to said internet service provider.

8. A content program information search system, comprising:

a server logically connected with a database configured to store a plurality of search terms transmitted from a digital signal receiver, said server configured to extract at least one transmission search term of the plurality of search terms according to an order of priority based on search frequency from the database and to transmit the at least one transmission search term;

the at least one digital signal receiver configured to detect and to display from a digital signal transmitted from the transmitter detailed content information for a selected search term of the plurality of search terms, and to transmit the at least one selected search term to an internet service provider; and

the internet service provider configured to transmit to the database the selected search term transmitted from the at least one digital signal receiver, and to provide a path for transmitting to the at least one digital signal receiver the at least one transmission search term,

wherein the at least one digital signal receiver is configured to display in a set arrangement pattern the at least one transmission search term in the order of priority transmitted from the server, and

wherein the digital signal receiver is an external device,

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device.

9. The content program information search system as claimed in claim 8, wherein the digital signal receiver includes:

a communication interface configured to receive the at least one transmission transmitted from the server, and to transmit the selected search term to the database;

a list generator configured to generate a search term list by arranging the at least one transmission search term received by said communication interface in the arrangement pattern based on the order of priority;

a controller configured to control the generated search term list to be displayed, if a user request for a search for content programs is received, and, if the selected search term is selected

from the displayed search term list, to control display of the detailed content information for the selected search term;

a graphic engine configured to provide the search term list and the detailed content information for the selected search term in a displayable form according to control of the controller; and

a display unit configured to display at least one of the search term list and the detailed content information provided by the graphic engine.

10. The content program information search system as claimed in claim 8, wherein the digital signal receiver is an internet-accessible web television receiver.

11. An information search method for a system including a digital signal receiver connected through an internet network to a server for providing content program guide information, said method comprising:

detecting for a selected search term detailed content information from a digital signal transmitted from a transmitter to the digital signal receiver, and transmitting the selected search term to the server through the internet network;

storing the selected search term in a database logically connected to the server; and

extracting at least one transmission search term according to an order of priority based on search frequency from the database and transmitting to the transmitter the at least one transmission search term and the content program guide information, the selected search term

being a search term one of inputted and selected through a search mode view set in the digital signal receiver to search for the content program guide information,

wherein the transmitter is an external device,

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device.

12. The information search method as claimed in claim 11, wherein the detecting the detailed content information for the selected search term includes:

detecting the at least one transmission search term from the digital signal;

generating a search term list by arranging the detected transmission search term in an arrangement pattern based on the order of priority;

displaying, if a search for a content program is requested, the generated search term list based on the search frequency and providing a search mode;

displaying, if the selected search term is selected from the displayed search term list, the detailed content information for the selected search term; and

transmitting the selected search term to the server via the internet network.

13. The information search method as claimed in claim 11, further comprising at least one terminal communicatably connected to the internet network and capable of inputting and

outputting data, the selected search term searched from the terminal being transmitted to and stored in the server.

14. The information search method as claimed in claim 11, wherein the search mode is at least one of a search mode based on search frequency, a search mode based on a proper noun extracted from the content program guide information, a search mode based on an input text, and a search mode based on a program content category.

15. A content program information search system comprising:

a first database configured to store a plurality of search terms input from external devices, a search term of the plurality of search terms being forwarded to said first database after a search is performed based on the forwarded search term; and

a server configured to extract based on an order of priority a transmission search term of the plurality of search terms from said first database, and to transmit the transmission search term via at least one of a wireless transmitter and a network transmission device to a digital signal receiver,

wherein the search is for at least one of a content program signal and a detailed content information detected by the digital signal receiver, and

wherein the order of priority is based on a search frequency for the forwarded search term,

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device.

16. (canceled).

17. The system of claim 15, wherein the search includes a list mode in which a list of transmission search terms is displayed by the digital signal receiver according to the order of priority, and a selection mode, in which the forwarded search term of the list of search terms is selected.

18. The system of claim 15, further comprising a second database logically connected to said server and configured to store the detailed content information, wherein said server extracts the detailed content information from said second data base and transmits the detailed content information to the digital signal receiver.

19. A content program information receiving search system comprising:

a controller configured to generate a list of search terms according to an order of priority based on at least one transmission search term received, to provide a selected search term from the list of search terms to a digital signal receiver, and to forward to a server the selected search term; and

said digital signal receiver configured to detect and to display for the selected search term at least one of a content signal and detailed content information from a digital signal transmitted



from a transmitter, the at least one transmission search term being one of received in the digital signal and received from the server via a digital network,

wherein the order of priority is based on a search frequency of the selected search term  
and

wherein the search term is input from an external device,

wherein the search frequency corresponds to a frequency at which the search terms are input from the external input device.

20. (canceled).

21. The system of claim 19, wherein said controller transmits the selected search term to the server via the digital network.

22. (canceled).

23. The content program information search system as claimed in claim 1, wherein the search frequency corresponds to a frequency at which the search terms are typed in by the user.

24. The content program information search system as claimed in claim 1, wherein the search frequency corresponds to a frequency at which the search terms are selected by the user.

**EVIDENCE APPENDIX**

NONE.

**RELATED PROCEEDINGS APPENDIX**

NONE.